



Out 4/14/04

IEEE Xplore®

1 Million Documents

1 Million Users

...And Growing

» Advanced Search

Help FAQ Terms IEEE Peer Review

Quick Links



Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

Try our New Full-text Search Prototype **GO**

- 1) Enter a single keyword, phrase, or Boolean expression.
Example: acoustic imaging (means the phrase acoustic imaging plus any stem variations)
- 2) Limit your search by using search operators and field codes, if desired.
Example: optical <and> (fiber <or> fibre) <in> ti
- 3) Limit the results by selecting Search Options.
- 4) Click Search. See [Search Examples](#)

```
(cross*bar* <or> (cross
<near/1> bar*) <or> xbar*)
<and> agent*
```

Start Search **Clear**

Note: This function returns plural and suffixed forms of the keyword(s).

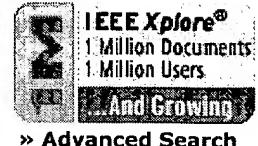
Search operators: <and> <or> <not> <in> [More](#)

Field codes: au (author), ti (title), ab (abstract), jn (publication name), de (index term) [More](#)

Help**Search Options:****Select publication types:**

- IEEE Journals
- IEE Journals
- IEEE Conference proceedings
- IEE Conference proceedings
- IEEE Standards

Select years to search:From year: All to Present **Organize search results by:**Sort by: Year In: Descending orderList 15 Results per page

Welcome
United States Patent and Trademark Office

Help FAQ Terms IEEE Peer Review

Quick Links

Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

Try our New Full-text Search Prototype **GO**

- 1) Enter a single keyword, phrase, or Boolean expression.
Example: acoustic imaging (means the phrase acoustic imaging plus any stem variations)
- 2) Limit your search by using search operators and field codes, if desired.
Example: optical <and> (fiber <or> fibre) <in> ti
- 3) Limit the results by selecting Search Options.
- 4) Click Search. See [Search Examples](#)

```
(cross*bar* <or> (cross
<near/1> bar*) <or> xbar*)
<and> ((rout* <or> forward*)
<sentence> (table* <or> map*))
```


Note: This function returns plural and suffixed forms of the keyword(s).

Search operators: <and> <or> <not> <in> [More](#)

Field codes: au (author), ti (title), ab (abstract), jn (publication name), de (index term) [More](#)

[Help](#)

Search Options:

Select publication types:

- IEEE Journals
- IEE Journals
- IEEE Conference proceedings
- IEE Conference proceedings
- IEEE Standards

Select years to search:

From year: All to Present

Organize search results by:

Sort by: Year In: Descending orderList Results per page



Help FAQ Terms IEEE Peer Review

Quick Links



Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

Try our New Full-text Search Prototype **GO**

- 1) Enter a single keyword, phrase, or Boolean expression.
Example: acoustic imaging (means the phrase acoustic imaging plus any stem variations)
- 2) Limit your search by using search operators and field codes, if desired.
Example: optical <and> (fiber <or> fibre) <in> ti
- 3) Limit the results by selecting Search Options.
- 4) Click Search. See [Search Examples](#)

```
(cross*bar* <or> (cross
<near/1> bar*) <or> xbar*)
<and> ((rout* <or> forward*)
<near/4> source)
```


Note: This function returns plural and suffixed forms of the keyword(s).

Search operators: <and> <or> <not> <in> [More](#)

Field codes: au (author), ti (title), ab (abstract), jn (publication name), de (index term) [More](#)

[Help](#)

Search Options:

Select publication types:

- IEEE Journals
- IEE Journals
- IEEE Conference proceedings
- IEE Conference proceedings
- IEEE Standards

Select years to search:

From year: All to Present

Organize search results by:

Sort by: Year In: Descending orderList 15 Results per page

Help FAQ Terms IEEE Peer Review

Quick Links

Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

Try our New Full-text Search Prototype **GO**

- 1) Enter a single keyword, phrase, or Boolean expression.
Example: acoustic imaging (means the phrase acoustic imaging plus any stem variations)
- 2) Limit your search by using search operators and field codes, if desired.
Example: optical <and> (fiber <or> fibre) <in> ti
- 3) Limit the results by selecting Search Options.
- 4) Click Search. See [Search Examples](#)

(cross*bar* <or> (cross
<near/1> bar*) <or> xbar*)
<and> controller*

Note: This function returns plural and suffixed forms of the keyword(s).

Search operators: <and> <or> <not> <in> [More](#)

Field codes: au (author), ti (title), ab (abstract), jn (publication name), de (index term) [More](#)

[Help](#)

Search Options:

Select publication types:

- IEEE Journals
- IEE Journals
- IEEE Conference proceedings
- IEE Conference proceedings
- IEEE Standards

Select years to search:

From year: All to Present

Organize search results by:

Sort by: Year
In: Descending order

List Results per page



Help FAQ Terms IEEE Peer Review

Quick Links 

Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- Journals & Magazines
- Conference Proceedings
- Standards

Search

- By Author
- Basic
- Advanced

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

Try our New Full-text Search Prototype 

Help

- 1) Enter a single keyword, phrase, or Boolean expression.
Example: acoustic imaging (means the phrase acoustic imaging plus any stem variations)
- 2) Limit your search by using search operators and field codes, if desired.
Example: optical <and> (fiber <or> fibre) <in> ti
- 3) Limit the results by selecting Search Options.
- 4) Click Search. See [Search Examples](#)

```
(cross*bar* <or> (cross
<near/1> bar*)) <or> xbar*)
<and> header
```


 Start Search  Clear

Note: This function returns plural and suffixed forms of the keyword(s).

Search operators: <and> <or> <not> <in> [More](#)

Field codes: au (author), ti (title), ab (abstract), jn (publication name), de (index term) [More](#)

Search Options:

Select publication types:

- IEEE Journals
- IEE Journals
- IEEE Conference proceedings
- IEE Conference proceedings
- IEEE Standards

Select years to search:

From year: to

Organize search results by:

Sort by: In: order

List Results per page